

What is claimed is:

1. A digital reception apparatus comprising:  
receiver for performing reception processing on a received signal; and  
5 distortion corrector for performing a distortion correction on the reception-processing processed received signal using a characteristic of said receiver, and thereby removing a non-linear distortion from the received signal.
- 10 2. The digital reception apparatus according to claim 1, wherein said receiver includes quadrature demodulator for performing quadrature demodulation processing on the received signal.
3. The digital reception apparatus according to claim  
15 1, wherein said receiver includes filter calculator for performing filter calculation that limits a frequency band of the received signal.
4. The digital reception apparatus according to claim  
20 1, wherein said receiver includes adjuster for adjusting the amplitude of the received signal, based on the amplitude of a signal necessary for demodulation contained in the received signal.
5. The digital reception apparatus according to claim  
25 1, wherein said receiver includes quantizer for performing quantization on the received signal.
6. The digital reception apparatus according to claim 5, wherein said quantizer performs linear quantization

on the received signal.

7. The digital reception apparatus according to claim 5, wherein said quantizer performs non-linear quantization on the received signal.

5 8. The digital reception apparatus according to claim 7, wherein said distortion corrector converts the received signal that has been converted into a non-linear signal by said quantizer into a linear signal, using a quantization characteristic of said quantizer.

10 9. The digital reception apparatus according to claim 8, further comprising:

filter calculator for performing filter calculation on the received signal that has been converted into a non-linear signal by said quantizer.

15 10. The digital reception apparatus according to claim 8, further comprising:

calculator for performing arithmetical calculation on the received signal that has been converted into a non-linear signal by said quantizer.

20 11. The digital reception apparatus according to claim 7, wherein said distortion corrector comprises signal processor for performing digital signal processing on the received signal that has been converted into a non-linear signal by said quantizer, and said signal  
25 processor converts the digital-signal-processing processed received signal into a signal represented by a code system suitable for another digital signal

processing to be performed on the digital-signal-processing processed received signal.

12. The digital reception apparatus according to claim 11, further comprising:

5           converter for converting a demodulated signal obtained by demodulation processing in said signal processor into a linear signal,  
          wherein said receiver performs the reception processing on the received signal, based on a control signal  
10       contained in the demodulated signal that has been converted into the linear signal.